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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,634	05/08/2001	Alan R. Reinberg	MI22-1704	4400
21567	7590	10/06/2003	EXAMINER	
WELLS ST. JOHN P.S. 601 W. FIRST AVENUE, SUITE 1300 SPOKANE, WA 99201			WILLIAMS, ALEXANDER O	
			ART UNIT	PAPER NUMBER
			2826	

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/851,634

Applicant(s)

REINBERG

Examiner

Alexander O Williams

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 64-87 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 64-87 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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Serial Number: 09/851634 Attorney's Docket #: MI22-1704

Filing Date: 5/8/2001;

Applicant: Reinberg

Examiner: Alexander Williams

This application is a divisional application of U.S. Patent Application Serial # 09/561794 filed on May 1, 2000 which is a divisional of U.S. Patent Application Serial # 09/444280 filed on November 19, 1999.

Applicant's Amendment in Paper # 15, filed 6/12/03, has been acknowledged.

Claims 1-63 have canceled.

The disclosure is objected to because of the following informalities: The related application information should be updated.

Appropriate correction is required.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed language in claims 68, 69 and 71 to 87 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 68, 69 and 71 to 87 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention:

In claim 68, it is unclear and confusing to what is meant and what shows "a step at the at least one perpendicular edge from the substrate to the raised mandril." Where is this shown in figures 15a to 16B?

In claim 69, it is unclear and confusing to what is meant and what shows "a step at each of the four edges from the substrate to the raised mandril." Where is this shown in figures 15a to 16B?

In claim 71, it is unclear and confusing to what is meant and what shows "a layer of structural material forming an edge defined feature on the at least one perpendicular edge, but not on the beveled edge or the step." Where is this shown in figures 15a to 16B?

In claim 71, it is unclear and confusing to what is meant and what shows "a layer of structural material forming an edge defined feature on the at least one perpendicular edge, the edge defined features extending to a full lateral extent of the perpendicular edge." Where is this shown in figures 15a to 16B?

Any of claims 68, 69 and 71 to 87 not specifically addressed above are rejected as being dependent on one or more of the claims which have been specifically objected to above.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 64 to 87, insofar as claims 68, 69 and 71 to 87, are rejected under 35 U.S.C. § 102(b) as being anticipated by Poggie et al. (U.S. Patent # 6,087,199).

For example, in claim 64, Pogge et al. (figures 1 to 10a) specifically figures 4a, 4b and 5 show an intermediate construction of an integrated circuit comprising: a semiconductor substrate **400**; a raised mandril **403** over the substrate, the raised mandril being raised out from the substrate and having at least one edge substantially perpendicular **(two of the sides of the four-sided mesa like structures)(column 10, lines 17-29)** to the substrate and at least one beveled edge **(two spaced beveled edges out the four-sided mesa like structure) (column 10, lines 17-29)**; and a layer

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of structural material (not shown but described) **(see column 10, lines 53-65)** forming an edge defined feature on the at least one perpendicular edge.

In claim 65, Pogge et al.'s bevel is less than or equal to about 45 degrees.

It would have been obvious to one of ordinary skill in the art to provide the bevel having the angle in the range as claimed, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPTO 233.

In claim 66, Pogge et al.'s raised mandril comprises four edges, including two edges **(two spaced beveled edges out the four-sided mesa like structure) (column 10, lines 17-29)** substantially perpendicular to the substrate and two beveled edges **(two of the sides of the four-sided mesa liked structures)(column 10, lines 17-29).**

In claim 67, Pogge et al.'s structural material is conductive **(see column 10, lines 53-65).**

Response

Applicant's arguments filed 6/12/03 have been fully considered, but are moot in view of the new grounds of rejections detailed above.

Field of Search	Date
U.S. Class and subclass: 257/486,586,623,618,622,329,403,751-764 438/669,412,459,713	3/9/03 9/26/03
Other Documentation: foreign patents and literature in 257/486,586,623,618,622,329,403,751-764 438/669,412,459,713	3/9/03 9/26/03
Electronic data base(s): U.S. Patents EAST	3/9/03 9/26/03

Papers related to this application may be submitted to Technology Center 2800 by facsimile transmission. Papers should be faxed to Technology Center 2800 via the Technology Center 2800 Fax center located in Crystal Plaza 4-5B15. The faxing of such papers must conform with the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The Technology Center 2800 Fax Center number is (703) 308-7722 or 24. Only Papers related to Technology Center 2800 APPLICATIONS SHOULD BE FAXED to the GROUP 2800 FAX CENTER.

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Any inquiry concerning this communication or any earlier communication from the examiner should be directed to **Examiner Alexander Williams** whose telephone number is **(703) 308-4863**.

Any inquiry of a general nature or relating to the status of this application should be directed to the **Technology Center 2800 receptionist** whose telephone number is **(703) 308-0956**.

9/28/03

A handwritten signature in black ink, appearing to read 'A. Williams', with a stylized flourish at the end.

Primary Examiner
Alexander O. Williams